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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/623,132	07/18/2003	Rikuro Obara	2515-062A	4483

7590 09/16/2004

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EXAMINER	
BURCH, MELODY M	

ART UNIT	PAPER NUMBER
3683	

DATE MAILED: 09/16/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/623,132	OBARA, RIKURO	
	Examiner	Art Unit	
	Melody M. Burch	3683	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *23 February 2004*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1,6 and 7* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1,6 and 7* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *23 February 2004* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date *2/23 & 27/04*.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 7/18/03 has been entered.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

3. Claims 1, 6, and 7 are rejected under 35 U.S.C. 103(a) as being unpatentable over Obara '919 in view of US Patent 5556209 to Obara et al.

Re: claims 1 and 6. Obara '919 shows in figure 1 a motor with a compound bearing capable of being used for an OA device having a spindle shaft 5 assembled within a sleeve 10 of the compound bearing, the compound bearing comprising: two rows of balls, each row having a plurality of balls 13,14, the spindle shaft formed of a stepped shaft including a reduced diameter portion shown in the area of element number 8 and a larger diameter portion shown in the area of element number 6, an inner ring 8 slidingly fit over the reduced diameter portion of the spindle shaft, the first row of balls 14 interposed between a raceway formed on an outer peripheral surface of

the inner ring and a raceway formed on an inner peripheral surface of the sleeve and the second row of balls 13 interposed between a raceway formed on an outer peripheral surface of the larger diameter portion of the spindle shaft and another raceway formed on the inner peripheral surface of the sleeve, wherein the compound bearing is characterized in that the inner ring is slidingly fitted on the reduced diameter portion of the spindle shaft as shown and a hub member 9 is fitted on and secured to the sleeve 10, and the motor is formed by constituting the hub member and sleeve secured to thereto as a rotor of the motor as disclosed in col. 3 lines 62-64, but does not disclose the specific limitation of an adhesive securing the inner ring to the reduced diameter portion in a pre-loaded state.

Obara et al. '209 teach in col. 5 lines 44-47 the use of an adhesive to secure the inner ring to the reduced diameter portion in a pre-loaded state. It would have been obvious to one of ordinary skill in the art at the time the invention was made to have modified the construction of the inner ring and the reduced diameter shaft portion of Obara '919 to have included an adhesive securing the inner diameter to the shaft in a pre-loaded state in order to provide a construction that is excellent in rigidity and resistant to vibration as discussed in col. 6 lines 24-28 of Obara et al. '209.

Re: claim 7. See figure 2 of Obara '919 with regard to the connection of the hub member 9 and the spindle shaft 5.

Double Patenting

4. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11

F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970);and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

5. Claims 1 and 6 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1 and 9 of U.S. Patent No. 6078466 to Obara in view of Obara et al. '209. Although the conflicting claims are not identical, they are not patentably distinct from each other because the specific recitations of the use of the bearing device in the environment of a magnetic disk unit and of the grooves of the peripheral surfaces of the inner ring and the sleeve renders the patent claim more specific than the application claim relative to the grooves and is, therefore, covered by the decision in In re Goodman, 29 USPQ 2d 2010 (Fed. Circ. 1993) which held that for the purposes of obvious double patenting a later genus (broad claim) is not patentable over an earlier species (narrow) claim. With regard to the pre-loaded state of connection and the use of adhesive, Obara et al. '209 teach in col. 5 lines 44-47 the use of an adhesive to secure the inner ring to the reduced diameter portion in a pre-loaded state. It would have been obvious to one of ordinary skill in the art at the time the invention was made to have modified the construction of the inner ring and the reduced diameter shaft portion of Obara '466 to have included an adhesive securing the inner diameter to the shaft in a pre-loaded state in order to provide a

construction that is excellent in rigidity and resistant to vibration as discussed in col. 6 lines 24-28 of Obara et al. '209.

6. Claims 1 and 6 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claim 1 of US Patent 6511303 in view of Obara '919. US Patent 6511303 teaches the claimed invention substantially as set forth in claim 1, but does not include the limitation of the inner ring providing the preloaded adhesive connection. Obara et al. '209 teach in col. 5 lines 44-47 the use of an adhesive to secure the inner ring to the reduced diameter portion in a pre-loaded state. It would have been obvious to one of ordinary skill in the art at the time the invention was made to have modified the construction of the inner ring and the reduced diameter shaft portion of US Patent 6511303 to have included an adhesive securing the inner diameter to the shaft in a pre-loaded state in order to provide a construction that is excellent in rigidity and resistant to vibration as discussed in col. 6 lines 24-28 of Obara et al. '209.

Response to Arguments

7. Applicant's response filed 2/23/04 have been fully considered but they are not persuasive. Since Applicant failed to provide arguments regarding the art and double patenting rejections, the response to the arguments from the parent case has been maintained: Examiner maintains that as broadly claimed the components of Obara '919 are "fitted on and secured to" and "integrated" with each other. First, Examiner notes that in In re Larson, 340 F.2d 965, 968, 144 USPQ 347,349 (CCPA 1965) the courts held that using an integral one piece construction or several parts rigidly secured

together as a single unit is a matter of obvious engineering choice. The similarities between a one-piece construction and a rigidly secured multi-piece construction are even noted by Applicant on pg. 20 of the Remarks in which it is admitted that "...elements which are connected to provide an 'integrated' structure which has certain structural characteristics similar to a one-piece structure...". The base reference, Obara '919, also mentions in col. 4 lines 49-50 that the use of the hub, flange, or yoke holder being a separate part from the bearing body (sleeve) is an alternate construction that is old and well-known in the art. Additionally, it is noted that the Obara '919 reference refers to the hub and the sleeve components, for example, with separate element numbers 9 and 10, respectively, and even states that the components may be "integrated". Finally, Applicant states on pg. 20 of the Remarks that one of the advantages of the claimed connection between the components of the instant invention is that the components may each be formed of different materials which are better suited for the specific requirements. Although the use of different materials is more specific than the claim language, the inclusion of such a limitation would not result in the claims being patentable since Applicant also states on pg. 19 of the Remarks that it is erroneous to assume that the term integral "necessarily always refers to components which are formed of the same material". Consequently, it is suggested by Applicant that the integral connections of the Obara '919 structure may also include different materials and, thus, offer the same advantages as those of the instant invention.

With regard to the drawings, Examiner has approved the entry of replacement

figure 3. Since the specification clearly supports the structure set forth in replacement figure 3 (particularly, the connection between the shaft 5 and the base 2) and since replacement figure 3 is a duplicate of figure 3 of the foreign priority document, the Examiner views the originally filed figure 3 as an obvious error.

Conclusion

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Melody M. Burch whose telephone number is 703-306-4618. The examiner can normally be reached on Wednesday-Thursday (7:30 AM-4:00 PM).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jack Lavinder can be reached on 703-308-3421. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

mmb 9/1/04
mmb

September 1, 2004

Melody M. Burch
9/1/04